

KONAN UNIVERSITY

# Application of Verbo-Tonal Method to Online English Pronunciation Teaching: Focusing on Using Nursery Rhymes

著者 (英)	Midori IBA
journal or publication title	The Journal of the Institute for Language and Culture
volume	25
page range	47-62
year	2021-03-24
URL	<a href="http://doi.org/10.14990/00004015">http://doi.org/10.14990/00004015</a>

# Application of Verbo-Tonal Method to Online English Pronunciation Teaching: Focusing on Using Nursery Rhymes

Midori IBA

## Abstract

ヴェルボトナル法 (Verbo-Tonal Method: VT法) は言語の聞き取りや再生に重要な働きを果たすリズム・イントネーションなどプロソディーを重視した言語理論およびその指導法を指す。聴覚障害者の発音指導や外国語教育の分野で広く応用されているが、その具体的な指導法の一つに各言語特有のプロソディーを象徴するわらべ歌 (nursery rhymes) の導入がある。本稿では、まずVT法の概要を述べ、次に2020年前期、コロナ禍でオンライン授業に切り替わった英語発音のウェブ授業2クラスにおいて、VT法に基づく英語のnursery rhymesをなぜ、どのように導入したか、またその結果はどうであったかを、受講生の反応が反映される大学の行った授業評価アンケートを基に記述し、オンライン授業の効用、限界点も交えて考察する。研究室で行う実験と違い、実際の授業への導入においての考察なので、はっきりと結論づけることはできないがVT法に基づくnursery rhymesの授業への導入は想定外の高い評価を得たので、受講生には良い効果があったのではと考えられる。今後、学生の声がどのように変化したか音声分析によって効果測定を行う予定である。

**Key words:** *Verbo-Tonal Method, pronunciation teaching, online teaching, nursery rhymes*

## 1. Introduction

### 1.1. Overview of the Verbo-Tonal Method

The Verbo-Tonal Method (VTM) was developed in the 1950s by Professor Petar Guberina, a linguist who was interested in speech perception at the University of Zagreb, Croatia. VTM is a theory that emphasizes prosody, such as rhythm and intonation, which plays an important role in speech production and perception. The theory has been widely applied in two fields: pronunciation training for the hearing impaired and foreign language teaching. VTM was introduced to Japan by Roberge (1973) and has been practiced in the fields of foreign language teaching and rehabilitation for hearing-impaired children. The author was involved in foreign language teaching using VTM at Sophia University in Tokyo with Roberge in the 1980s and 1990s.

In the field of pronunciation training for hearing-impaired children, nursery rhymes and physical rhythm exercises are used to activate the brain by

stimulating the tactile, visual, and kinaesthetic senses (Koakutsu, 2002). This is different from the original auditory transmission. Guidance has been given to develop the circuit of the above sensation and to structure the brain again, and it has achieved remarkable results. In addition, VTM has also been used for language training with adult patients by speech therapists working in hospitals, and for teaching in elementary school hearing loss classes.

In the field of foreign language instruction, Zhang (2004, 2005) has used VTM for teaching the Chinese language. Teaching materials based on VTM are being actively developed for speech training in Chinese as a second language. In Japan, the application of VTM to foreign language teaching began in the French language. It has been gradually applied to teaching Japanese as a foreign language, and these days VTM is well known and widely used. However, the use of VTM in English teaching has not been widely explored. In 1985 Roberge published an English pronunciation textbook in Japan, but as a consequence it was not widely adopted. Masuda (2005) attributes the limited spread of VTM to its complexity and the difficulty of quantifying the effectiveness of the use of body movements.

## **1.2. Basic Concepts of the Verbo-Tonal Method**

VTM emphasizes both the presentation of linguistic material in a situational context, and the physical and affective participation of language learners in communicative interaction without the direct teaching of linguistic rules. Here are the main features of VTM.

### **(1) Using a stimulus-response procedure in the learning situation**

The stimulus (i.e. speech) is produced with natural rhythm and intonation. The elicited response is viewed as an indication of the learner's perception of the stimulus.

### **(2) An optimal octave for each vowel and consonant**

Perception of vowels and consonants can be developed by using filters to modify the frequencies presented to each listener.

### **(3) Body as a transmitter and receiver**

The body acts as a transmitter for low frequency biological and physiological rhythms and as a resonator of speech energy. The amount of tension of the body affects production of more tense phonemes.

### **(4) Situational language teaching**

Speech and language develop simultaneously and interdependently as a

result of the need for expression and communication. Their development can be enhanced through the use of a planned situational play technique by teachers or therapists, especially with hearing-impaired young children.

(5) Using body movements

Body movements are used to develop perception of the parameters of speech, as well as to correct phonetic speech production errors. Body movements are always accompanied by speech production. The typical progression is as follows. Initially a body movement is selected for the stimulation of speech sound. Then the stimulus-response technique is used. The movement may change with the progression of the training for the purpose of correction. In the meantime, the movement will be more natural, and the learner will repeat the same stimulated sound or sound sequence while doing another movement. Finally, the movement is discontinued, and natural speech remains.

(6) Using nursery rhymes

Nursery rhymes are used to stimulate the speech of hearing-impaired children or language learners because the rhythm of a nursery rhyme, perceived through low frequency integration, provides a robust learning experience for natural speech development. The use of nursery rhymes facilitates both speech perception and production and can be used to correct rhythm, intonation, pitch, and articulation. Nursery rhymes will also serve to increase auditory memory.

There are three kinds of nursery rhymes:

- Nursery rhymes with syllables only. These are used to stimulate and correct a certain sound. The rhyme should follow the characteristics of that sound. Tension of the phoneme is modified by the strategic use of timing, pauses, stress pattern and intonation within the rhyme. Speech is transformed into musical measures.
- Nursery rhymes with syllables, words, and phrases. The musical qualities of the syllables (i.e. time, rhythm, and intonation) are transformed into words and phrases.
- Nursery rhymes which have definite content. Speech in the form of a poem or rhyme is used to train rhythm and intonation patterns.

## 2. Application of Nursery Rhymes

### 2.1. Why Nursery Rhymes?

English nursery rhymes were used in online pronunciation teaching in the current study. Bryant et. al. (1989) suggests that nursery rhymes are related to infants' subsequent sensitivity to rhyme and phonemes. Since the subject of their study was children, there may be concern that it could not be applied to older foreign language learners. However, based on previous teaching experience it was thought that encountering English nursery rhymes might enhance the phonological sensitivity of Japanese learners of English. Furthermore, as mentioned in the previous chapter (1.2.(5)), VTM applies nursery rhymes to language education.

Furthermore, pronunciation teaching tends to be monotonous, and there are a lot of technical explanations such as how to pronounce vowels and consonants. It was decided that it would be better to use nursery rhymes, which contain many amusing elements, so that students can enjoy learning. In addition, many nursery rhymes are centuries old and culturally worth studying. They are a common cultural foundation of English-speaking countries. They are often cited or used in novels, songs, and movies. As such, students not only acquire pronunciation, but also learn about the culture behind the rhymes.

### 2.2. Which Nursery Rhymes?

According to the web version of Oxford Bibliographies,

“Nursery rhymes vary in style, subject, tone, and theme, although many are marked by a use of rhythm and rhyme that makes them easy to remember. They include nonsense rhymes, lullabies, finger-plays, counting-out rhymes, riddles, games, songs, and ballads, among other types.”

12 rhymes which contained the target sounds (mostly consonants), and which seemed to be suitable for students to get used to English prosody were selected. “Humpty Dumpty” was adopted for the first session because many Japanese students already know that rhyme<sup>1</sup>. Consonants and vowels in the rhyme were not focused on at the initial stage, because students might be overwhelmed. Instead, they were asked to focus on the prosody of the rhyme. As the sessions progressed, the focus changed to include consonants in addition to prosody. As some consonants are frequently dealt with, students may already have been familiar

---

<sup>1</sup> Humpty Dumpty is introduced in New Crown 1 (Sanseido), an English textbook for first-year junior high school students in Japan.

with them.

Here are the 12 nursery rhymes that were selected for use in class:

**【First Session】 Humpty Dumpty (Focus: English prosody)**

Humpty Dumpty sat on a wall,  
 Humpty Dumpty had a great fall,  
 All the king's horses, all the king's men,  
 Couldn't put Humpty together again. (<https://www.youtube.com/watch?v=h1fiPIhGXYA>)

**【Second Session】 Mary, Mary (Focus: English prosody, consonant/r/)**

Mary, Mary, quite contrary  
 How does your garden grow?  
 With silver bells and cockleshells  
 And pretty maids all in a row.  
 And pretty maids all in a row. (<https://www.youtube.com/watch?v=EDKw10e-1ko>)

**【Third Session】 Boys and Girls (Focus: English prosody, consonant/l/ and /r/)**

Boys and girls, come out to play,  
 The moon doth shine as bright as day;  
 Leave your supper, and leave your sleep,  
 And come with your playfellows in the street.  
 Come with a whoop, come with a call,  
 Come with a good will or not at all.  
 Up the ladder and down the wall,  
 A halfpenny roll will serve us all. (<https://www.youtube.com/watch?v=fUyvfOtoK1s>)

**【Fourth Session】 Puffer Train (Focus: English prosody, consonant/p/)**

Down at the station, early in the morning,  
 See the little puffer trains, all in a row.  
 Here comes the driver to start up the engine,  
 Puff! Puff! Peep! Peep! Off we go!  
 Puff! Puff! Peep! Peep! Off we go!  
 Puff! Puff! Peep! Peep! Off we go!  
 (<https://www.bbc.co.uk/teach/school-radio/nursery-rhymes-down-at-the-station/zdy28xs>)

**【Fifth Session】** Old McDonald (Focus: English prosody, consonant /tʃ/, word McDonald /mʌ'kdʌnʌld/)

Old MacDonald had a farm, E-I-E-I-O.

And on his farm, he had some chicks, E-I-E-I-O.

With a chick, chick here,

And a chick, chick there,

Here a chick, there a chick,

Everywhere a chick, chick,

Old MacDonald had a farm, E-I-E-I-O.

(<https://www.youtube.com/watch?v=Cw7SVkZbyhM>)

**【Sixth Session】** Row, Row, Row Your Boat (Focus: English prosody, consonant /r/ and /l/)

Row, row, row your boat

Gently down the stream

Merrily, merrily, merrily, merrily

Life is but a dream (<https://www.youtube.com/watch?v=Cw7SVkZbyhM>)

**【Seventh Session】** Rain, Rain, Go away (Focus: English prosody, consonant /r/ and /l/)

Rain, rain, go away,

Come again, another day

Little Johnny wants to play (<https://www.youtube.com/watch?v=BtDolWTSpV8>)

**【Eighth Session】** Dr. Foster (Focus: English prosody, consonant /d/, /f/, /ʃ/, /ð/)

Doctor Foster went to Gloucester,

In a shower of rain.

He stepped in a puddle,

Right up to his middle,

And never went there again. (<https://www.youtube.com/watch?v=SVKFAAnWI0qI>)

**【Ninth Session】** Baa, Baa, Black Sheep (Focus: English prosody, consonant /b/, /f/, /s/, and vowel /ʊ/)

Baa, baa, black sheep

Have you any wool?

Yes, sir, yes, sir, three bags full

One for the master

And one for the dame  
 And one for the little boy  
 Who lives down the lane?  
 Baa, baa, black sheep  
 Have you any wool?  
 Yes, sir, yes, sir, three bags full (<https://www.youtube.com/watch?v=MR5XS0djKMA>)

**【Tenth Session】** Three Blind Mice (Focus: English prosody, consonant /  $\theta$  /, /bl/, /ð/, and /f/)

Three blind mice.  
 Three blind mice.  
 See how they run.  
 See how they run.  
 They all ran after the farmer's wife,  
 Who cut off their tails with a carving knife,  
 Did you ever see such a sight in your life?  
 As three blind mice. (<https://www.youtube.com/watch?v=MfaChKSV8kg>)

**【Eleventh Session】** Who Killed Cock Robin (Focus: English prosody, consonant / k/, r/, /s/, /r/, /l/, /f/ and /d/)

Who killed Cock Robin?  
 I, said the Sparrow,  
 with my bow and arrow,  
 I killed Cock Robin.

Who saw him die?  
 I, said the Fly,  
 with my little eye,  
 I saw him die.

Who caught his blood?  
 I, said the Fish,  
 with my little dish,  
 I caught his blood.

(with melody: <https://www.youtube.com/watch?v=EA6NJbMxbI0>)

(without melody: (<https://www.youtube.com/watch?v=t6PywLMa78w>))



**【Twelfth Session】** Twinkle, Twinkle, Little Star (Focus: English prosody, sound/  
tw/, /sk/, consonant /l/, and vowel /ʌ/)

Twinkle, twinkle, little star,

How I wonder what you are.

Up above the world so high,

Like a diamond in the sky,

Twinkle, twinkle, little star,

How I wonder what you are. (<https://www.youtube.com/watch?v=fzKuCDdoNbk>)

### **2.3. How were the rhymes used?**

Due to the spread of COVID-19, a state of emergency was declared in April 2020 in Japan. All classes at the university where the current study was conducted transitioned online from the third week of that month. Two Intermediate English Pronunciation classes, taught by the researcher, were involved in the study. The syllabi for the classes were adjusted to an online format. The following section introduces details about the syllabi, textbook, students, typical class schedule, and homework assignments. The rhymes were used as part of these assignments.

### **Syllabus and students**

As both Intermediate English Pronunciation classes were elective courses for second-year students and above, and the content was the same, the following syllabus is representative of both classes.

#### **Syllabus**

(Purpose of the course): Students will

- focus on sentence-level units of pronunciation (patterns of English stress, rhythm, pitch, and intonation)
- learn the globally recognized symbols of the International Phonetic Alphabet
- refine their pronunciation of English consonants, especially the ones that are typically difficult for Japanese English learners
- practice the English vowel sounds, particularly those that are not found in Japanese
- become more confident and effective communicators through mastery of the English sound system

(Textbook) The instructors of English Pronunciation chose Grant and Yu's "Well Said Intro" for two classes out of four, and "Well Said" for the other two classes. "Well Said Intro" was used in classes taught by the researcher. These two books are unique in focusing on the "music" of the English language. In this case, music means syllables, stress, rhythm, thought groups and intonation. A classical textbook of pronunciation starts with explanation of vowels and consonants but in these two books, they are provided as supplements.

(Schedule of the class) A 90-minute class was held once a week, 15 times a semester, and two credits were available to students completing the course. Here are the themes of each class. 1: Guidance/ Your Pronunciation Needs and Goals, 2: Discourse/ Focus Words (Chapter 12), 3: Discourse/ Intonation (Chapter 13), 4: Discourse/ Thought Groups (Chapter 14), 5: Sentences: Rhythm/ Stressed Words (Chapter 9), 6: Review Work (Chapter 12, 13, 14, 9), 7: Sentences: Reduced Words (Chapter 10), 8: Sentences/ Connected Speech (Chapter 11), 9: Word Stress: (Chapter 7, 8), 10: Consonants I (Part VI 8, 9, 10), 11: Consonants II (Part VI 11, 12, 13, 14, 15, 16, 17), 12: Review Work (for the final review test), 13: Vowels I (Part VI 1. 2. 3), 14: Vowels II (Part VI 4, 5, 6), 15: Final Review Test

## **Students**

One pronunciation class was held on Wednesday and another was held on Thursday. The Wednesday class consisted of 9 female students and 13 male students, for a total of 22 students: 14 in the second year and 8 in the third year. There was a total of 24 students in the Thursday class: 11 female students and 13 male students, of which 9 were in the second year and 15 were in the third year. There were no students with hearing disabilities. In addition, no one had lived in an English-speaking country or studied abroad for more than a month.

## **Class schedule**

A typical 90-minute class schedule was as follows.

1. 0:00 Roll call (Zoom)
2. 0:15 Explanation of the contents of the chapter and homework of the day (Zoom)
3. 0:45 Group work in breakout rooms (Zoom)
4. 1:00 Students left the Zoom session and practiced pronunciation by themselves
5. 1:30 Students made and submitted a voice recording by the end of the class

day, using their smartphone. iPhone owners used the “Voice Memos” application, and Android owners used “Easy Voice Recorder”. Students submitted their voice recording by attaching the file to an email. The deadline of submission was 17:00 on the same day.

### **Homework assignments**

It was determined that it would be difficult to acquire the basics of English pronunciation with only 15 lessons over the spring semester. Therefore, two types of homework assignments were created so that students could practice little by little every day. One was to practice with the website “English Pronunciation Practice for Japanese Learners”, created by the researcher<sup>2</sup>, completing one section each week. The other was to practice one or two of the above-mentioned nursery rhymes a week. Students were asked to watch nursery rhyme videos online, mostly via YouTube as shown in section 2.2, and to recite the rhymes. Most of the rhymes have melodies, but students could choose to practice with or without the melody. Lastly, students recited the rhyme they had practiced and some sentences from the “English Pronunciation Practice for Japanese Learners” in a Zoom breakout session in class the following week. They were asked to practice repeatedly before class to remember the rhymes. The final review test was conducted by Zoom in a one-on-one interview format. The student first explained the vowels using the vowel chart, and then had to explain differences in the sounds of randomly selected consonant pairs. Finally, the student had to recite one of the 12 nursery rhymes, also selected at random. This incentivized the students to keep practicing all 12 rhymes before the assessment. The following Figure 1 is a copy of the first assignment.

---

<sup>2</sup> This website was produced by the researcher with a subsidy from the Ministry of Education, Culture, Sports, Science and Technology and is open to the public.


中級英語 Pronunciation Wed, 1st

① Homework Wednesday, April 22, 2020

Student ID Number \_\_\_\_\_

Name \_\_\_\_\_

1) Access the website 英語発音入門 by Google. ( <http://kccn.konan-u.ac.jp/ilc/english/> )



→Enter →はじめに→ 第一部 英語を実際に話すには

→1. 英語独特のリズムがある

このパートを何回も練習してください。この中にある文を来週ひとりひとり発音してもらいます。


具体的には以下の文章がはいっています。何度も聞いてできるだけモデル音声に近づけて発音してください。暗記する必要はありません。ひとつひとつの音は気にしないで、リズムやイントネーションをまねてください。

1. I play tennis with my friend.
2. a) He's a teacher.  
b) He's a good teacher.  
c) He's a very good teacher.
3. Twinkle, twinkle, little star, how I wonder what you are.
4. Remember other people's birthdays.
5. Never take action when you are angry.
6. Nobody knows what will happen next.
7. I do believe better days are ahead.

How many times did you repeat and practice? ( ) times

2. Access the YouTube website Humpty Dumpty - 3D Animation English Nursery Rhyme songs

<https://www.youtube.com/watch?v=h1fiPIhGXYA>



このNursery Rhyme(ナーサリーライム:子守歌)は英語圏ではとても有名です。英語特有のリズムが良くわかります。何回も聴いて覚えてください。メロディーはつけてもつけなくても構いませんが、同じ速さで言えるように練習してください。

Humpty Dumpty sat on a wall,  
Humpty Dumpty had a great fall,  
All the king's horses, all the king's men,  
Couldn't put Humpty together again.

How many times did you listen and practice? ( ) times

Figure 1. A copy of the first homework assignment

## 2.4. Results of Student Survey by University

At the university where the study was conducted, student surveys for class improvement are given at the end of each semester. These surveys are conducted on the web, and responses are anonymous. In the spring semester of 2020, the researcher was in charge of five classes, and student feedback for the two pronunciation classes was overwhelmingly positive by comparison to the other three (see Figures 2, 3).

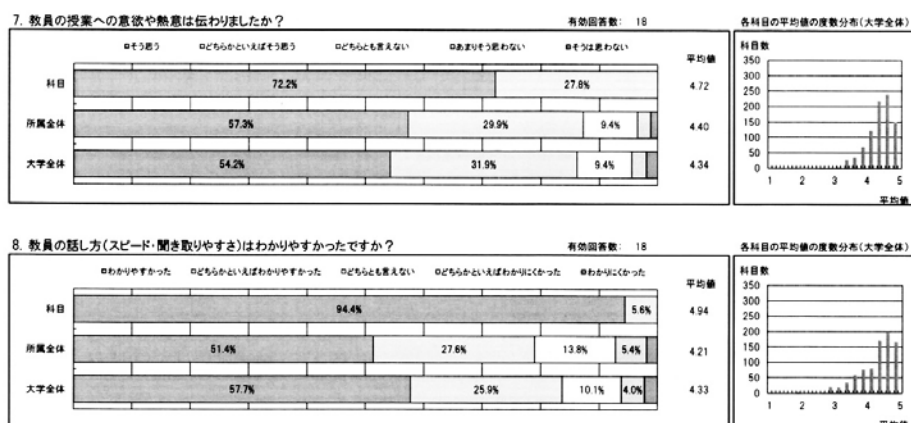
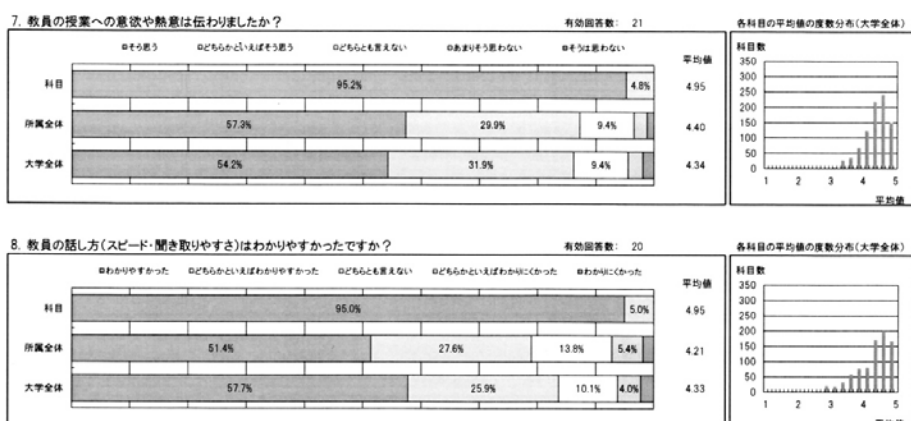
Figure 2. A part of the student survey: Wednesday class (Q7n=18, Q8 n=18)<sup>3</sup>

Figure 3. A part of the student survey: Thursday class (Q7 n=21, Q8 n=20)

The results of Question 7, “Did you feel the teacher's motivation and enthusiasm for the course?” were surprising. The researcher had never thought of herself as enthusiastic, and the people around her thought the same way. However, she was seen as enthusiastic by the students, especially by the Thursday class of whom 95.2 percent answered “I feel so” and 4.8 percent answered “I rather feel so”. In a typical year, without exception, there have always been a few students who responded negatively to this question. However, in this case all students responded

3 科目: the subject (of the instructor), 所属全体: the faculty the instructor belongs to, 大学全体: the whole university”

affirmatively.

The results of Question 8 “*Was the teacher's way of speaking (speed, ease of listening) easy to understand?*”, were equally surprising. 94.4 percent of students (Wednesday) and 95.0 percent of students (Thursday) responded “*Yes, I think so.*” and 5.6 percent of students (Wednesday) and 5.0 percent of students (Thursday) answered “*Yes, I rather think so.*”

Other than the two questions above, there were 13 question items in the survey. While those results were affirmative as well, the results of Questions 7 and 8 in particular were more positive than had been anticipated.

### **3. Conclusion and Implication for Further Research**

#### **3.1. Conclusion**

##### **3.1.1. Use of Nursery Rhymes Based on VTM**

The use of nursery rhymes in pronunciation courses based on the principles of VTM cannot be established as the sole reason for the positive results of the 2020 student surveys. However, there is a high possibility that it played a role. The Intermediate English Pronunciation courses were launched in 2019. At that time, nursery rhymes were not used on these courses in order to concentrate more on the textbook. While the 2019 student survey results were somewhat positive, they were outstripped by those from 2020. In addition to the introduction of nursery rhymes, there was one other major difference between the 2019 classes and the 2020 classes: the transition from face-to-face to online teaching. While it seems plausible that the online format may account for some of the positive feedback, such courses also have negative aspects that will be dealt with in the next section.

On the other hand, as mentioned in section 1.2.(6), nursery rhymes can be systematically applied to phonetic correction under a VTM framework. When correcting a certain sound, shorter nursery rhymes with syllables can be introduced. The nursery rhyme should follow the characteristics of that sound. If improving prosodic features is the focus, then longer nursery rhymes with syllables, words, and phrases should be used. The musical qualities of the syllables are transformed into words and phrases. Finally, another benefit is that students actually take the use of nursery rhymes quite seriously when provided with a clear explanation of the rationale for their use. For the above reasons, it is likely that the use of nursery rhymes under a VTM model had a positive impact on the student feedback in the pronunciation courses

### **3.1.2. Effect of Online Pronunciation Teaching**

Due to the influence of COVID-19, in the spring semester of 2020 all classes went online. The researcher, who had previously not been very interested in teaching online classes, was forced to learn how to teach pronunciation in new ways. As a result, the pros and cons became apparent. Online pronunciation classes were a very different, but ultimately valid way to teach. The format had some benefits and drawbacks:

#### **Benefits**

- The teacher could focus on seeing their students' faces without masks
- Pronunciation practice involves vocalization, and in an online environment there was no need to worry about the spread of viral droplets
- It was easier for students to spend their time productively, as there are fewer opportunities for chatting

#### **Drawbacks**

- It was difficult to develop meaningful teacher-student relationships online, no matter how much interaction there was.
- Communication between students was very limited, even with the use of communication tools like Zoom breakout rooms.
- Not all students had equal access to stable internet environments.

As for the difficulty of accessibility, it will be eventually solved as technology evolves. However, a more pressing concern is that we might not understand the impact of the lack of physical communication on humans. Perhaps we need to compromise by incorporating advantages of both face-to-face communication and online communication.

### **3.2. Implications for Further Research**

This paper outlined the principles of VTM, and how they guided the use of English nursery rhymes in two English pronunciation classes that were switched online due to the influence of COVID-19. Student feedback on the classes was remarkably positive. Unlike experiments conducted under laboratory conditions, these nursery rhymes were used in actual classes. Therefore, while it is impossible to say definitively, the introduction of nursery rhymes had a good effect on students because the courses were highly evaluated by them.

At the very beginning of the class, each student recorded themselves reciting "Humpty Dumpty" and sent the audio file to the researcher. After the final review

test, each student recorded and submitted the same nursery rhyme again. For further research, these recordings will be investigated with audio analysis software, to see how the students' voices changed or improved after pronunciation practice.

## References

- Bryant, P. E., et al. (1989). Nursery rhymes, phonological skills and reading. *Journal of Child Language*, 16(2), 407-428.
- Grant, L. & Yu, E.E. (2016). *Well Said Intro 2<sup>nd</sup> edition*. National Geographic Learning Cengage Learning.
- Grant, L. (2017). *Well Said 4<sup>th</sup> edition*. National Geographic Learning Cengage Learning.
- Iba, M. (2004). English pronunciation practice for Japanese learners. Retrieved from <http://kccn.konan-u.ac.jp/ilc/english/>
- Ludovic, K. (2010). Phonetic correction in class with Verbo-Tonal method. *Matsuyama University Studies in Language and Literature*, 30(1), 35-56.
- Morley, J. (1994). *Pronunciation pedagogy and theory*. TESOL, Inc.
- Renard, R. (1975). *Introduction to the verbo-tonal method of phonetic correction*. Didier.
- Zhang, F. (2004). Using interactive feedback tool to enhance pronunciation in language learning. In Mishra and Sharma (Eds.), *Interactive Multimedia in Education and Training*. Idea Group Publishing, 377-399.
- Zhang, F. (2005). Making Feedback last: An integrated approach to feedback in language learning. Son (ed) *Computer-Assisted Language Learning: Concepts, Contexts and Practices*. APACALL Book, iUniverse, Inc, 145-167.
- Oxford Bibliographies (n.d.). Retrieved December 30, 2020 from <https://www.oxfordbibliographies.com/view/document/obo-9780199791231/obo-9780199791231-0124.xml>
- グベリナ, P. (1990). 『外国語学習における身体の役割』(言調聴覚論研究シリーズ第15巻), 上智大学聴覚言語障害研究センター.
- 小坪 博子他編. (2002). 『聴覚・言語障害教育および外国語教育のためのVTS入門』グベリナ記念ヴェルボトナル普及協会.
- 城 哲哉. (2003). 「SGAV教授法による音声教育」『名古屋学院大学外国語教育紀要』第33号, 名古屋学院大学外国語教育センター, 33-38.
- 根岸 雅史他編. (2016) 『New Crown 1』. 三省堂, 76-77.
- 増田 喜治. (2005). [VT法の身体運動と発話]『名古屋学院大学外国語教育紀要』第34号, 名古屋学院大学外国語教育センター, 31-38.
- 町田 章一他. (1994). 『言聴聴覚論の輪郭』上智大学聴覚言語障害研究センター.
- ロベルジュ, クロード編. (1973). 『ザグレブ言語教育—理論と実践』学書房.
- ロベルジュ, クロード編. (1979). 『発音矯正と言語教育—ザグレブ言語教育の理論と実践』大修館書店.



- ロベルジュ, クロード他. (1985). 『VT法による英語発音指導教本』 研究社.
- ロベルジュ, クロード他. (1990). 『日本語の発音指導—VT法の理論と実際』 凡人社.